#L

OIPE

RAW SEQUENCE LISTING DATE: 10/18/2001
PATENT APPLICATION: US/09/965,631 TIME: 09:53:30

Input Set : A:\LEX-0241-USA SEQLIST.txt
Output Set: N:\CRF3\10182001\I965631.raw

ENTERED

```
   4 <110> APPLICANT: Friddle, Carl Johan
   5       Hilbun, Erin
   7 <120> TITLE OF INVENTION: Novel Human Proteases and Polynucleotides Encoding the Same
   9 <130> FILE REFERENCE: LEX-0241-USA
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/965,631
C--> 11 <141> CURRENT FILING DATE: 2001-09-27
  11 <150> PRIOR APPLICATION NUMBER: US 60/236,689
  12 <151> PRIOR FILING DATE: 2000-09-29
  14 <160> NUMBER OF SEQ ID NOS: 7
  16 <170> SOFTWARE: FastSEQ for Windows Version 4.0
  18 <210> SEQ ID NO: 1
  19 <211> LENGTH: 966
  20 <212> TYPE: DNA
  21 <213> ORGANISM: homo sapiens
  23 <400> SEQUENCE: 1
  24 atgcttctgc tgggcatcct aaccctggct ttcgccgggc gaaccgctgg aggctctgag      60
  25 ccagagcggg aggtagtcgt tcccatccga ctggacccgg acattaacgg ccgccgctac     120
  26 tactggcggg gtcccgagga ctccggggat cagggactca tttttcagat cacagcattt     180
  27 caggaggact tttacctaca cctgacgccg gatgctcagt tcttggctcc cgccttctcc     240
  28 actgagcatc tgggcgtccc cctccagggg ctcaccgggg gctcttcaga cctgcgacgc     300
  29 tgcttctatt ctggggacgt gaacgccgag ccggactcgt tcgctgctgt gagcctgtgc     360
  30 gggggctccc gcggagcctt tggctaccga ggcgccgagt atgtcattag cccgctgccc     420
  31 aatgctagcg cgccggcggc gcagcgcaac agccagggcg cacaccttct ccagcgccgg     480
  32 ggtgttccgg gcgggccttc cggagacccc acctctcgct gcggggtggc ctcgggctgg     540
  33 aaccccgcca tcctacgggc cctggaccct tacaagccgc ggcgggcggg cttcggggag     600
  34 agtcgtagcc ggcgcaggtc tgggcgcgcc aagcgtttcg tgtctatccc gcggtacgtg     660
  35 gagacgctgg tggtcgcgga cgagtcaatg gtcaagttcc acggcgcgga cctggaacat     720
  36 tatctgctga cgctgctggc aacggcggcg cgactctacc gccatcccag catcctcaac     780
  37 cccatcaaca tcgttgtggt caaggtgctg cttcttagag atcgtgactc cgggcccaag     840
  38 gtcaccggca atgcggccct gacgctgcgc aacttctgtg cctggcagaa gaagctgaac     900
  39 aaagtgagtg acaagcaccc cgagtactgg gacactgcca tcctcttcac caggcaggag     960
  40 agttga                                                              966
  42 <210> SEQ ID NO: 2
  43 <211> LENGTH: 321
  44 <212> TYPE: PRT
  45 <213> ORGANISM: homo sapiens
  47 <400> SEQUENCE: 2
  48 Met Leu Leu Leu Gly Ile Leu Thr Leu Ala Phe Ala Gly Arg Thr Ala
  49  1               5                  10                  15
  50 Gly Gly Ser Glu Pro Glu Arg Glu Val Val Pro Ile Arg Leu Asp
  51             20                  25                  30
  52 Pro Asp Ile Asn Gly Arg Arg Tyr Tyr Trp Arg Gly Pro Glu Asp Ser
  53         35                  40                  45
  54 Gly Asp Gln Gly Leu Ile Phe Gln Ile Thr Ala Phe Gln Glu Asp Phe
  55     50                  55                  60
  56 Tyr Leu His Leu Thr Pro Asp Ala Gln Phe Leu Ala Pro Ala Phe Ser
  57 65                  70                  75                  80
```

RAW SEQUENCE LISTING DATE: 10/18/2001
PATENT APPLICATION: US/09/965,631 TIME: 09:53:30

Input Set : A:\LEX-0241-USA SEQLIST.txt
Output Set: N:\CRF3\10182001\I965631.raw

```
58 Thr Glu His Leu Gly Val Pro Leu Gln Gly Leu Thr Gly Gly Ser Ser
59                  85                  90                  95
60 Asp Leu Arg Arg Cys Phe Tyr Ser Gly Asp Val Asn Ala Glu Pro Asp
61              100                 105                 110
62 Ser Phe Ala Ala Val Ser Leu Cys Gly Gly Leu Arg Gly Ala Phe Gly
63          115                 120                 125
64 Tyr Arg Gly Ala Glu Tyr Val Ile Ser Pro Leu Pro Asn Ala Ser Ala
65      130                 135                 140
66 Pro Ala Ala Gln Arg Asn Ser Gln Gly Ala His Leu Leu Gln Arg Arg
67 145                 150                 155                 160
68 Gly Val Pro Gly Gly Pro Ser Gly Asp Pro Thr Ser Arg Cys Gly Val
69                  165                 170                 175
70 Ala Ser Gly Trp Asn Pro Ala Ile Leu Arg Ala Leu Asp Pro Tyr Lys
71              180                 185                 190
72 Pro Arg Arg Ala Gly Phe Gly Glu Ser Arg Ser Arg Arg Arg Ser Gly
73          195                 200                 205
74 Arg Ala Lys Arg Phe Val Ser Ile Pro Arg Tyr Val Glu Thr Leu Val
75      210                 215                 220
76 Val Ala Asp Glu Ser Met Val Lys Phe His Gly Ala Asp Leu Glu His
77 225                 230                 235                 240
78 Tyr Leu Leu Thr Leu Leu Ala Thr Ala Ala Arg Leu Tyr Arg His Pro
79                  245                 250                 255
80 Ser Ile Leu Asn Pro Ile Asn Ile Val Val Val Lys Val Leu Leu Leu
81              260                 265                 270
82 Arg Asp Arg Asp Ser Gly Pro Lys Val Thr Gly Asn Ala Ala Leu Thr
83          275                 280                 285
84 Leu Arg Asn Phe Cys Ala Trp Gln Lys Lys Leu Asn Lys Val Ser Asp
85      290                 295                 300
86 Lys His Pro Glu Tyr Trp Asp Thr Ala Ile Leu Phe Thr Arg Gln Glu
87 305                 310                 315                 320
88 Ser
91 <210> SEQ ID NO: 3
92 <211> LENGTH: 2853
93 <212> TYPE: DNA
94 <213> ORGANISM: homo sapiens
96 <400> SEQUENCE: 3
97 atgcttctgc tgggcatcct aaccctggct ttcgccgggc gaaccgctgg aggctctgag      60
98 ccagagcggg agggtagtcgt tcccatccga ctggacccgg acattaacgg ccgccgctac     120
99 tactggcggg gtcccgagga ctccggggat cagggactca tcttttcagat cacagcattt     180
100 caggaggact tttacctaca cctgacgccg gatgctcagt tcttggctcc cgccttctcc     240
101 actgagcatc tgggcgtccc cctccagggg ctcaccgggg gctcttcaga cctgcgacgc     300
102 tgcttctatt ctggggacgt gaacgccgag ccggactcgt tcgctgctgt gagcctgtgc     360
103 gggggctccc gcggagcctt tggctaccga ggcgccgagt atgtcattag cccgctgccc     420
104 aatgctagcg cgccggcggc gcagcgcaac agccagggcg cacaccttct ccagcgccgg     480
105 ggtgttccgg gcgggccttc cggagacccc acctctcgct gcgggggtggc ctcgggctgg     540
106 aaccccgcca tcctacgggc cctggaccct tacaagccgc ggcgggcggg cttcgggagg     600
107 agtcgtagcc ggcgcaggtc tgggcgcgcc aagcgtttcg tgtctatccc gcggtacgtg     660
108 gagacgctgg tggtcgcgga cgagtcaatg gtcaagttcc acggcgcgga cctggaacat     720
109 tatctgctga cgctgctggc aacggcggcg cgactctacc gccatcccag catcctcaac     780
```

RAW SEQUENCE LISTING DATE: 10/18/2001
PATENT APPLICATION: US/09/965,631 TIME: 09:53:30

Input Set : A:\LEX-0241-USA SEQLIST.txt
Output Set: N:\CRF3\10182001\I965631.raw

```
110 cccatcaaca tcgttgtggt caaggtgctg cttcttagag atcgtgactc cgggcccaag   840
111 gtcaccggca atgcggccct gacgctgcgc aacttctgtg cctggcagaa gaagctgaac   900
112 aaagtgagtg acaagcaccc cgagtactgg gacactgcca tcctcttcac caggcaggac   960
113 ctgtgtggag ccaccacctg tgacaccctg ggcatggctg atgtgggtac catgtgtgac  1020
114 cccaagagaa gctgctctgt cattgaggac gatgggcttc catcagcctt caccactgcc  1080
115 cacgagctgg gccacgtgtt caacatgccc catgacaatg tgaaagtctg tgaggaggtg  1140
116 tttgggaagc tccgagccaa ccacatgatg tccccgaccc tcatccagat cgaccgtgcc  1200
117 aacccctggt cagcctgcag tgctgccatc atcaccgact tcctggacag cgggcacggt  1260
118 gactgcctcc tggaccaacc cagcaagccc atctccctgc ccgaggatct gccgggcgcc  1320
119 agctacaccc tgagccagca gtgcgagctg gcttttggcg tgggctccaa gccctgtcct  1380
120 tacatgcagt actgcaccaa gctgtggtgc accgggaagg ccaagggaca gatggtgtgc  1440
121 cagacccgcc acttcccctg ggccgatggc accagctgtg gcgagggcaa gctctgcctc  1500
122 aaaggggcct gcgtggagag acacaacctc aacaagcaca gggtggatgg ttcctgggcc  1560
123 aaatgggatc cctatggccc ctgctcgcgc acatgtggtg ggggcgtgca gctggccagg  1620
124 aggcagtgca ccaaccccac ccctgccaac gggggcaagt actgcgaggg agtgagggtg  1680
125 aaataccgat cctgcaatct ggagccctgc cccagctcag cctccggaaa gagcttccgg  1740
126 gaggagcagt gtgaggcttt caacggctac aaccacagca ccaaccggct cactctcgcc  1800
127 gtggcatggg tgcccaagta ctccggcgtg tctccccggg acaagtgcaa gctcatctgc  1860
128 cgagccaatg gcactggcta cttctatgtg ctggcaccca aggtggtgga cggcacgctg  1920
129 tgctctcctg actccacctc cgtctgtgtc caaggcaagt gcatcaaggc tggctgtgat  1980
130 gggaacctgg gctccaagaa gagattcgac aagtgtgggg tgtgtggggg agacaataag  2040
131 agctgcaaga aggtgactgg actcttcacc aagcccatgc atggctacaa tttcgtggtg  2100
132 gccatccccg caggcgcctc aagcatcgac atccgccagc gcggttacaa agggctgatc  2160
133 ggggatgaca actacctggc tctgaagaac agccaaggca agtacctgct caacgggcat  2220
134 ttcgtggtgt cggcggtgga gcgggacctg gtggtgaagg gcagtctgct gcggtacagc  2280
135 ggcacgggca cagcggtgga gagcctgcag gcttcccggc ccatcctgga gccgctgacc  2340
136 gtggaggtcc tctccgtggg gaagatgaca ccgccccggg tccgctactc cttctatctg  2400
137 cccaaagagc ctcgggagga caagtcctct catcccaagg acccccgggg accctctgtc  2460
138 ttgcacaaca gcgtcctcag cctctccaac caggtggagc agccggacga caggcccctc  2520
139 gcacgctggg tggctggcag ctgggggccg tgctccgcga gctgcggcag tggcctgcag  2580
140 aagcgggcgg tggactgtcg gggctccgcc gggcagcgca cggtccctgc ctgtgatgca  2640
141 gcccatcggc ccgtggagac acaagcctgc ggggagccct gccccacctg ggagctcagc  2700
142 gcctggtcac cctgctccaa gagctgcggc cggggatttc agaggcgctc actcaagtgt  2760
143 gtgggccacg gaggccggct gctggcccgg gaccagtgca acttgcaccg caagccccag  2820
144 gagctggact tctgcgtcct gaggccgtgc tga                               2853
146 <210> SEQ ID NO: 4
147 <211> LENGTH: 950
148 <212> TYPE: PRT
149 <213> ORGANISM: homo sapiens
151 <400> SEQUENCE: 4
152 Met Leu Leu Leu Gly Ile Leu Thr Leu Ala Phe Ala Gly Arg Thr Ala
153  1               5                  10                  15
154 Gly Gly Ser Glu Pro Glu Arg Glu Val Val Val Pro Ile Arg Leu Asp
155             20                  25                  30
156 Pro Asp Ile Asn Gly Arg Arg Tyr Tyr Trp Arg Gly Pro Glu Asp Ser
157         35                  40                  45
158 Gly Asp Gln Gly Leu Ile Phe Gln Ile Thr Ala Phe Gln Glu Asp Phe
159     50                  55                  60
160 Tyr Leu His Leu Thr Pro Asp Ala Gln Phe Leu Ala Pro Ala Phe Ser
```

RAW SEQUENCE LISTING DATE: 10/18/2001
PATENT APPLICATION: US/09/965,631 TIME: 09:53:30

Input Set : A:\LEX-0241-USA SEQLIST.txt
Output Set: N:\CRF3\10182001\I965631.raw

```
161 65                  70                  75                  80
162 Thr Glu His Leu Gly Val Pro Leu Gln Gly Leu Thr Gly Gly Ser Ser
163                 85                  90                  95
164 Asp Leu Arg Arg Cys Phe Tyr Ser Gly Asp Val Asn Ala Glu Pro Asp
165             100                 105                 110
166 Ser Phe Ala Ala Val Ser Leu Cys Gly Gly Leu Arg Gly Ala Phe Gly
167         115                 120                 125
168 Tyr Arg Gly Ala Glu Tyr Val Ile Ser Pro Leu Pro Asn Ala Ser Ala
169     130                 135                 140
170 Pro Ala Ala Gln Arg Asn Ser Gln Gly Ala His Leu Leu Gln Arg Arg
171 145                 150                 155                 160
172 Gly Val Pro Gly Gly Pro Ser Gly Asp Pro Thr Ser Arg Cys Gly Val
173                 165                 170                 175
174 Ala Ser Gly Trp Asn Pro Ala Ile Leu Arg Ala Leu Asp Pro Tyr Lys
175             180                 185                 190
176 Pro Arg Arg Ala Gly Phe Gly Glu Ser Arg Ser Arg Arg Arg Ser Gly
177         195                 200                 205
178 Arg Ala Lys Arg Phe Val Ser Ile Pro Arg Tyr Val Glu Thr Leu Val
179     210                 215                 220
180 Val Ala Asp Glu Ser Met Val Lys Phe His Gly Ala Asp Leu Glu His
181 225                 230                 235                 240
182 Tyr Leu Leu Thr Leu Leu Ala Thr Ala Ala Arg Leu Tyr Arg His Pro
183                 245                 250                 255
184 Ser Ile Leu Asn Pro Ile Asn Ile Val Val Val Lys Val Leu Leu Leu
185             260                 265                 270
186 Arg Asp Arg Asp Ser Gly Pro Lys Val Thr Gly Asn Ala Ala Leu Thr
187         275                 280                 285
188 Leu Arg Asn Phe Cys Ala Trp Gln Lys Lys Leu Asn Lys Val Ser Asp
189     290                 295                 300
190 Lys His Pro Glu Tyr Trp Asp Thr Ala Ile Leu Phe Thr Arg Gln Asp
191 305                 310                 315                 320
192 Leu Cys Gly Ala Thr Thr Cys Asp Thr Leu Gly Met Ala Asp Val Gly
193                 325                 330                 335
194 Thr Met Cys Asp Pro Lys Arg Ser Cys Ser Val Ile Glu Asp Asp Gly
195             340                 345                 350
196 Leu Pro Ser Ala Phe Thr Thr Ala His Glu Leu Gly His Val Phe Asn
197         355                 360                 365
198 Met Pro His Asp Asn Val Lys Val Cys Glu Glu Val Phe Gly Lys Leu
199     370                 375                 380
200 Arg Ala Asn His Met Met Ser Pro Thr Leu Ile Gln Ile Asp Arg Ala
201 385                 390                 395                 400
202 Asn Pro Trp Ser Ala Cys Ser Ala Ala Ile Ile Thr Asp Phe Leu Asp
203                 405                 410                 415
204 Ser Gly His Gly Asp Cys Leu Leu Asp Gln Pro Ser Lys Pro Ile Ser
205             420                 425                 430
206 Leu Pro Glu Asp Leu Pro Gly Ala Ser Tyr Thr Leu Ser Gln Gln Cys
207         435                 440                 445
208 Glu Leu Ala Phe Gly Val Gly Ser Lys Pro Cys Pro Tyr Met Gln Tyr
209     450                 455                 460
```

RAW SEQUENCE LISTING DATE: 10/18/2001
PATENT APPLICATION: US/09/965,631 TIME: 09:53:30

Input Set : A:\LEX-0241-USA SEQLIST.txt
Output Set: N:\CRF3\10182001\I965631.raw

```
210 Cys Thr Lys Leu Trp Cys Thr Gly Lys Ala Lys Gly Gln Met Val Cys
211 465                 470                 475                 480
212 Gln Thr Arg His Phe Pro Trp Ala Asp Gly Thr Ser Cys Gly Glu Gly
213                 485                 490                 495
214 Lys Leu Cys Leu Lys Gly Ala Cys Val Glu Arg His Asn Leu Asn Lys
215             500                 505                 510
216 His Arg Val Asp Gly Ser Trp Ala Lys Trp Asp Pro Tyr Gly Pro Cys
217         515                 520                 525
218 Ser Arg Thr Cys Gly Gly Gly Val Gln Leu Ala Arg Arg Gln Cys Thr
219     530                 535                 540
220 Asn Pro Thr Pro Ala Asn Gly Gly Lys Tyr Cys Glu Gly Val Arg Val
221 545                 550                 555                 560
222 Lys Tyr Arg Ser Cys Asn Leu Glu Pro Cys Pro Ser Ser Ala Ser Gly
223                 565                 570                 575
224 Lys Ser Phe Arg Glu Glu Gln Cys Glu Ala Phe Asn Gly Tyr Asn His
225             580                 585                 590
226 Ser Thr Asn Arg Leu Thr Leu Ala Val Ala Trp Val Pro Lys Tyr Ser
227         595                 600                 605
228 Gly Val Ser Pro Arg Asp Lys Cys Lys Leu Ile Cys Arg Ala Asn Gly
229     610                 615                 620
230 Thr Gly Tyr Phe Tyr Val Leu Ala Pro Lys Val Val Asp Gly Thr Leu
231 625                 630                 635                 640
232 Cys Ser Pro Asp Ser Thr Ser Val Cys Val Gln Gly Lys Cys Ile Lys
233                 645                 650                 655
234 Ala Gly Cys Asp Gly Asn Leu Gly Ser Lys Lys Arg Phe Asp Lys Cys
235             660                 665                 670
236 Gly Val Cys Gly Gly Asp Asn Lys Ser Cys Lys Lys Val Thr Gly Leu
237         675                 680                 685
238 Phe Thr Lys Pro Met His Gly Tyr Asn Phe Val Val Ala Ile Pro Ala
239     690                 695                 700
240 Gly Ala Ser Ser Ile Asp Ile Arg Gln Arg Gly Tyr Lys Gly Leu Ile
241 705                 710                 715                 720
242 Gly Asp Asp Asn Tyr Leu Ala Leu Lys Asn Ser Gln Gly Lys Tyr Leu
243                 725                 730                 735
244 Leu Asn Gly His Phe Val Val Ser Ala Val Glu Arg Asp Leu Val Val
245             740                 745                 750
246 Lys Gly Ser Leu Leu Arg Tyr Ser Gly Thr Gly Thr Ala Val Glu Ser
247         755                 760                 765
248 Leu Gln Ala Ser Arg Pro Ile Leu Glu Pro Leu Thr Val Glu Val Leu
249     770                 775                 780
250 Ser Val Gly Lys Met Thr Pro Pro Arg Val Arg Tyr Ser Phe Tyr Leu
251 785                 790                 795                 800
252 Pro Lys Glu Pro Arg Glu Asp Lys Ser Ser His Pro Lys Asp Pro Arg
253                 805                 810                 815
254 Gly Pro Ser Val Leu His Asn Ser Val Leu Ser Leu Ser Asn Gln Val
255             820                 825                 830
256 Glu Gln Pro Asp Asp Arg Pro Pro Ala Arg Trp Val Ala Gly Ser Trp
257         835                 840                 845
258 Gly Pro Cys Ser Ala Ser Cys Gly Ser Gly Leu Gln Lys Arg Ala Val
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/965,631

DATE: 10/18/2001
TIME: 09:53:31

Input Set : A:\LEX-0241-USA SEQLIST.txt
Output Set: N:\CRF3\10182001\I965631.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date